

# ***If research is the answer, what is the question?***

## **Key steps to turn decision-maker issues into research questions**

### **Summary**

Health system managers and policy makers face complex challenges. These often combine questions of facts (what can be done?) with choices about values (which is more important?). Participants at the foundation's 2001 workshop agreed that neither decision makers nor researchers alone could transform management and policy issues into good research questions.

Research and decision maker participants determined that the **key to producing good research questions which meet decision makers' needs is to create and maintain high-quality, ongoing interactions between research and management/policy partners**. Their primary advice to decision makers was:

1. Commit enough time. Before even starting, plan for a *series* of discussions with your potential research partner. It will take more than one conversation to identify the key problem and turn it into a researchable question!
2. Get a knowledge broker on the team. If you can, involve a research transfer professional (from your partner's organization, yours or both) to help plan and mediate discussion.
3. Understand your research partner. Find out what work they enjoy and dread. Learn what research can't and can't do: what kinds of answers can you get? How reliable are they?
4. Help your research partner understand you. It may not be obvious to a researcher what kinds of information are used in your management and policy decision-making processes, and why. If the research is going to provide answers you can use, they need to know this -and more.
5. Separate value choices from information needs. Decision makers often face questions about priorities (what *ought* to be). If key information is missing, research can shed some light on the options. However, research alone can never tell a decision maker which choice they prefer.
6. Unpackage the problem. Break the question down into what you and your partner agree are its key elements; narrow it down. Try phrasing the question in different ways, to make sure your research partner isn't restricted by unintended language choices.
7. Choose an approach. Once a potential question is identified, work with your research partner to decide what kind of research evidence is needed and how you can find or create it. Consider how much time and resources you both have, and what research already exists.
8. Make a plan for long-term interactions. Now that the partners have agreed on a question, work out how the decision maker will stay involved, be part of key decision points, and maintain their energy over the long haul. Evolve with your project, and the answer will be one you can use!

The challenge for decision makers is to determine when and how research can – and *can't* – help address their particular management or policy challenge

# ***If research is the answer, what is the question?***

## **Key steps to turn decision-maker issues into research questions**

### **Introduction**

Health system managers and policy makers face complex challenges. These multi-faceted problems often combine questions of facts (What can be done? What will happen?) with choices about values (Which is more important? What ought we to do?). As a result, one issue might break down into a range of specific questions, some of which can be answered or better understood through research, and some which can't. How can a decision maker figure out if their issue is researchable, and if so, what the research question might be?

This question was the focus of the 2001 Canadian Health Services Research Foundation (CHSRF) workshop, the third in a series of annual events to improve linkages and the exchange of ideas between foundation-funded researchers, managers and policy makers.

Workshop participants reviewed a number of management and policy identified by the decision-maker half of the group. They discussed where research might fit into each of these issues, and why research couldn't help answer certain kinds of questions. Participants agreed that neither decision makers nor researchers alone could transform management and policy issues into good research questions: it requires the skills and knowledge of both:

**the key to producing good research questions which meet decision makers' needs is to create and maintain high-quality, ongoing interactions between research and decision-maker partners.**

Drawing on their own successful – and not so successful! – experiences, participants shared the ideas and advice presented in the following pages. We are grateful to the many researchers and decision makers who contributed so much time and enthusiasm to developing the suggestions put forward in this document.

### **If research is the answer, then the question is one that...**

- ★ Identifies a **single** information gap
- ★ Typically takes forms such as “what...?” or “if... then...?”
- ★ Is usually **not** of the form “How do I implement?” or “Should we...?": it doesn't try to identify which values are better or more important
- ★ Might involve a demonstration project (“try this and evaluate it”) or comparisons (“what are the outcomes and costs of x vs. y?”)
- ★ Has a high level of specificity and focus
- ★ Usually requires the ability to control and measure some variables while observing and measuring changes in one or more other variables
- ★ Is often based on a theory or model, with a hypothesis to be tested and an outcome predicted
- ★ Leads to results generalizable beyond the context at hand
- ★ Leads to results which are reproducible by other research teams (i.e., not dependant on value judgements which can't be replicated)
- ★ Often clarifies problems rather than creates solutions

## Key steps to turn decision-maker issues into research questions

1. **Commit enough time. Before even starting, plan for a series of discussions with your potential research partner. It will take more than one conversation to identify the key problem and turn it into a researchable question!**

*Some ideas from the trenches:*

Managers and policy makers are increasingly partnering on health services research projects, and yet we find that the research is still not being used. What's going on here?

According to workshop participants, the problem starts when decision makers and researchers meet only once at the beginning of the project - to "get the question" - and once at the end - to "give the answer". But during all that time in between, the research question evolved, the context changed, and in the end, the frustrated researcher sees the results being ignored in decision making. Meantime, the decision maker still doesn't have the information required to make a decision. As a manager or policy maker, you need that information rather badly; how do you make sure this doesn't happen to you?

The solution is to make sure that the specific research question, and not just the broader issue, is important to *both* the research and decision making partners. A complex management or policy problem could spin out a number of specific questions; some of these will be more feasible or more interesting to research. Others will be more feasible or helpful to use. The trick is to find, in the multitude of possible questions, those which are both. If a decision maker simply states their problem, and the researcher goes off and alone devises a research question, the research probably won't result in an answer easy for the decision maker to use.

Mutual understanding and respect will go a long way towards helping decision makers and researchers find the necessary common ground. On-going, open, face-to-face dialogue is the key to this dynamic, relationship-building process, and that takes time. Decision makers should be prepared to continue with interactive, give and take discussions with their potential research partner, to debate suggestions and counter-suggestions, until consensus about the research question is achieved – or until it is clear that there really is no common ground between what the researcher and decision maker are looking for.

So before you start, decide whether both you and your research partner are willing to commit the time required. Like Rome, good applied research questions are not built in a day!

**Research is NOT...**

All of the answer  
(and sometimes isn't any of the answer)

**2. Get a knowledge broker on the team. If you can, involve a research transfer professional (from your partner's organization, yours or both) to help plan and mediate discussion.**

*Some ideas from the trenches:*

The best research questions are created collaboratively by a decision maker and researcher. However, partners with different cultures and interests and needs may find it difficult to respond to each other's needs and constraints, especially when these aren't explicit. Research transfer professionals or knowledge brokers can make it easier to connect with your partner.

A knowledge broker can be experienced in translating management and policy issues into research questions, and can anticipate and mitigate potential pitfalls and sources of conflict in the partnership. In other words, they can take some of the pain out of building new partnerships, and let you concentrate on getting the benefits out of your collaboration.

A mediator who speaks both the researchers' and decision makers' language can help you interpret each other's needs and get the dialogue going. It's not easy to be straightforward and open about expectations, needs, motivations and problems, and trust takes time to build. The broker can help smooth out and speed up this process, leading to better agreement between the partners about the research goals, and therefore a better research question.

As the project progresses, the facilitator or broker can help maintain communication, anticipate potential problems and changing circumstances, and help both partners identify and address issues before they unintentionally become major gaps between what the researchers are doing, and what the decision maker actually needs.

Knowledge brokers are a relative new concept in the health system. Many of the larger health services research groups now have brokers on staff, and some decision-making organizations are beginning to develop similar expertise\*. The role of knowledge brokers is still evolving; you might find that your research partner has worked with a knowledge broker to disseminate project results, but not to develop a research question. Working with a knowledge broker at the start of a project may be an experiment for all of you, but hopefully one you find fruitful! The foundation would be most pleased to hear about your experiences, and to share your advice with your colleagues.

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\* If you'd like to know more about finding and working with knowledge brokers, or creating them within your own organization, please contact the CHSRF knowledge transfer group at (613) 728-2238

**3. Understand your research partner. Find out what work they enjoy and dread. Learn what research can't and can't do: what kinds of answers can you get? How reliable are they?**

*Some ideas from the trenches:*

Research can help answer many questions. However, some types of questions are inherently more researchable than others. In addition, some questions may be researchable in theory, but in practice cost too much, require unavailable resources, create ethical problems or are otherwise not feasible to pursue. It often frustrates decision makers to find that the questions which are most researchable are not the ones whose results are most useable. Decision makers are thus better equipped to benefit from and contribute to the collaboration if they know what research can and can't do, and the limits of their partner's tools and interests. In the end, what is doable may simply not match what needs to be done.

Beyond finding out what research *can* be done, a decision maker also needs to know what research their potential partner would *want* to do. From a research perspective, some questions just aren't very interesting or rewarding to answer. A research partner might be looking for questions which are theory generating or validating, generalizable, and of broad interest, while the decision maker wants an answer that is practical, local, and immediate. The key to good collaboration is finding, within the critical management and policy issues, researchable questions which are both scientifically interesting and important to the decision maker.

You can explore your potential research partner's needs and constraints through discussing different scenarios and 'what ifs' with them:

- What research methodologies could be brought to bear on this question? What are the strengths and limitations of each?
- What disciplines could contribute to the research? How might the researcher include this expertise on the team?
- What areas of inquiry are most interesting to the researcher? What aspects of the question are scientifically interesting? What variables are most/ least interesting from a research perspective?
- Would potential funders be interested in this question? Which aspects of it and why?
- How would the researcher envision disseminating the research results? What role would they expect the decision-maker partner to play with respect to publishing and sharing the results?

**"How do we...?"**

Historically, research has tended to be retrospective (encouraging "what happened?" questions) rather than prospective (looking more to "should we?" and "how do we?" questions). Workshop participants felt initially that "how do we" is not about missing information but rather about how information is used (and is therefore not a research question).

However, participants eventually concluded that "how do we" may in fact be about missing information - that is, missing information about how to use information! The research community is working to understand and address the barriers to prospective research, and opportunities are growing to open the doors to research about upstream challenges and change and implementation issues.

**4. Help your research partner understand you. It may not be obvious to a researcher what kinds of information are used in your management and policy decision-making processes, and why. If the research is going to provide answers you can use, they need to know this - and more.**

*Some ideas from the trenches:*

There's nothing simple about most organization's decision-making processes, or the way research and other information are used within them. Managers and policy makers can do a lot to help their research partners understand how choices are made and influenced their decision-making environment. It is often useful for the research partner to participate in decision-making processes, much as the decision maker is participating in research processes.

Management and policy decisions are usually about making choices and achieving change. The obvious corollary is that collaborative research needs to lead to feasible choices and implementable changes if decision makers are going to use the results. Decision makers can help by talking to their research partner about issues such as:

- Why am I asking this question? Why do I want this information? How will it be used, and by whom? At what level?
- Who is involved in making this choice, and what type of evidence is most convincing for them, or most effective in this type of decision-making process or situation?
- What variables are most/ least important to my organization and our stakeholders?
- What is the broader political context in which this research must be framed?
- What constraints and opportunities may affect the use of different types of results?
- Is there a specific decision or change I need to make? Am I looking for information to help substantiate a change already planned?
- What are the risks in answering this question? What will I do with information that does not support current policy or a proposed course of action?
- What type of results, even though accurate, would simply not be practical or feasible to implement because of cost, available skills, entrenched interests, public or political will, or unacceptability to key users or stakeholders?
- What strategies have we tried before to engage in or use research? What worked and didn't, and why? What research results did we act on and not act on, and why?
- What might cause myself or my organization's interest or ability to invest time, resources or money into our research project to change significantly over the timeline of this partnership?

5. **Separate value choices from information needs:** Decision makers often face questions about priorities (what *ought* to be). If key information is missing, research can shed some light on the options. However, research alone can never tell a decision maker which choice they prefer.

*Some ideas from the trenches:*

Many critical issues faced by policy makers and managers are about establishing priorities. Decisions are often about “Which is better, A or B”? As a result, decision makers tend to ask questions like “What should I do?” or “What ought I do?”

Research usually can’t tell a decision maker “which do I prefer?”. But it can measure the outcomes of each option, evaluate the benefits of each option, and even improve understanding of stakeholders’ values and preferences, without attempting to say which are “better”.

**Values:**

Many management and policy problems are less about missing information than about choosing between conflicting values. Values can be, but rarely are, studied directly. Values-based issues can also be built into research questions and approaches. Value-laden terms can be defined through negotiation and through research, to create new research questions which are more amenable to observation and measurement. Better understanding of the role values play and their interaction with other forms of information in decision making is needed.

Management and policy issues tend to include both conflicts between different sets of values (Which need is more important?) as well as actual information gaps (Will outcomes improve if I do x?). Furthermore, even the information gaps themselves are frequently value-laden: “which option is better?” implies value choices about what defines “better” and which outcomes are more and less important. Your research partners may start with very different assumptions than yours about what outcomes are being sought by making the proposed change.

The goal is not to try and eliminate values from the issue or the research question, but rather to understand what values are in play, and how they affect the nature of the question and the possible answers. Once the values elements are identified, your research partner can work with you to create definitions of key values, and build these concepts into the research. Or it may turn out that what you really need is research to better understand the values in play!

Prying into a person or organization’s value system can be an uncomfortable experience. We are often not fully aware of the values we hold ourselves, let alone those important to others. Nonetheless, they shape both the kinds of questions we think to ask and the kinds of answers we are prepared to use. Explicit discussion up front can therefore pre-empt much future grief and misunderstanding about what you and your partner are trying to achieve. While the means are painful, the end is a research question which satisfies both your needs and your partner’s expectations.

**6. Unpackage the problem. Break the question down into what you and your partner agree are its key elements; narrow it down. Try phrasing the question in different ways, to make sure your research partner isn't restricted by unintended language choices.**

*Some ideas from the trenches:*

Decision makers usually start by describing a management or policy problem, not a research question. The issue is frequently not a researchable question in the form it is originally stated.

These big issues usually must first be taken apart to identify the specific questions buried within them. For example, the issue may be “How do we improve staff retention?”. Specific questions may relate to the needs of different employee groups, working conditions, HR plans, team building efforts or change management strategies. Where do you want to focus? Decision makers will likely spend a lot of time with their research partner, teasing out the possible questions and identifying the most pressing knowledge gaps.

Decision makers should be aware that for researchers, the form of a question (such as how? what? or why?) tends to dictate which research methodologies could be used to find an answer. If phrase a question a certain way, your research partner may assume you are looking for a specific type of research or answer.

Workshop participants also identified “How?” questions as a common ground for misunderstanding. Where researchers will commonly ask “What?”, decision makers will just as often as ask “how?”. Questions starting “How do I...” often mix in numerous variables, values, and assumptions about priorities and appropriate needs, all of which leads researchers to assume the question is not researchable. However, most “how” questions actually contain large chunks of both researchable and non-researchable elements – the former perhaps somewhat obscured. By “unpackaging” the how question into its many components and specific information needs, the researchable elements can be identified and evolved into question formats more amenable to research, such as “what?”, “if... then?”, or “why?”.

This unpackaging exercise may also help the partners identify what the “real” problem is, as opposed to its symptoms or manifestations. You might find that research provides you with valuable information, but not necessarily the information you thought you were looking for. As specific researchable questions are generated and debated, both partners should ask themselves and each other: what would I do (differently) if I had the answer to this question? If the answer on either side is “nothing” – keep looking!

**Unpackaging complex questions:**

A typical question might be: “How do we ensure the public has realistic expectations of the health system?” This question is not researchable as stated, given the number of value judgements embedded within it: what do we mean by “ensure”? by “realistic”?

However, that doesn't mean it's time to give up! If we unpackage the question, we may find a series of researchable elements embedded within it. For example, first to define “realistic”. Then to identify public expectations and evaluate the conditions under which they can be changed. Finally, we might also want to study publicly acceptable trade-offs between competing values (for example, what are members of the public willing to give up in order to get their expectations?).

**7. Choose an approach to respond. Once a potential question is identified, you and your research partner will have to choose the kind of action and evidence needed. Two major considerations are the deadline and the extent of existing evidence.**

*Some ideas from the trenches:*

Once you and your research partner have agreed on a question which can be researched and provides both interesting scientific opportunities and useable results, you need to consider the feasibility and appropriateness of different ways of answering the question.

Start by considering your timeline: is it immediate, medium or long term? Are you looking for an expert's best advice to help consider a decision which must be made tomorrow, or long term strategies to address changing client needs over decades? Be specific – your idea of long term may be rather different than your partners! If your research partner is envisioning a randomized controlled trial with changes in public health status as outcomes, and you are hoping for a synthesis of the available literature by budget-planning time, your partnership is not going to be off to a good start.

Talk to your research partner about what types of research available. Your options may include a bewildering array of new research, synthesis, systematic review, meta-analysis or literature review. New research possibilities might include theoretical work, evaluation, descriptive research and case studies, intervention studies, or a combination of these. Each of

these potential strategies should be evaluated against your deadlines as well as the amount and usefulness of research already available. (It's always possible that your partner might discover that quite a bit of information already exists, and the problem can be resolved more easily than you thought!)

Be aware that the type of research information you value may be different from your partner's. Local data, case studies of single organizations, and stories from peers are often of great value to decision makers but little interest to researchers. In the end, you might find that your most critical questions translate more readily into contract work rather than into research studies which are generalizable, publishable or innovative enough to engage your research partner. If this is the case, don't despair. Your partnership may have been brief, but it has still led to useful results, and more importantly, laid considerable groundwork to get to know a good partner and make a head start next time.

**Change processes & change management**

Many management and policy questions address underlying organizational structures and design, organizational behavior and theory, and the processes of change within health organizations and across health systems. Participants felt strongly that while health research has not commonly addressed these issues, they are, upon reflection, researchable.

Researchers could be looking at how health system decisions are made, how research and other forms of information are used in management and policy decision making, and the contextual, structural and system factors which influence these processes. In the future, research should become more able to provide evidence as support to management decisions and understand what kind of support these types of decision need. As well, research should begin to generate ideas which better support you as agents of change (that is, users of research).\*

\* An excellent resource is the UK National Health Service: *Organisational Change. A review for health care managers, professionals and researchers*; <http://www.sdo.lshtm.ac.uk/PDF/ChangeManagementReview.pdf>

**8. Develop long-term interactions plan. Develop a strategy to stay involved and be part of key decision points, to maintain your energy and enthusiasm over the long haul despite competing priorities. Evolve with your project, and the answer in the end will be an answer you can use!**

*Some ideas from the trenches:*

Neither research questions nor decision-maker needs remain static in time. A common problem identified by workshop participants was discovering, at the end of a project, that the decision maker could no longer relate to either the question (which has evolved without them) or the answer (which doesn't speak directly to their real problem). Nothing will discourage your research partner more thoroughly than providing you with research results and then finding out you no longer want them!

For many decision makers, research activities come on top of their "day job". Competing priorities are demanding and research quickly becomes a luxury activity, continually sacrificed for issues that can't wait. Even with the best of intentions, decision makers' targets move, their needs change and their interest in and commitment to the project may wax and wane. Many decision-making organizations are experiencing rapid turnover, to the point where sometimes the "life cycle of the decision may exceed the life cycle of the decision maker".

While these challenges cannot be eliminated, they can be managed. Keep the discussions going with your research partner, and you can help ensure that changes in the project are compatible with changes in your needs.

Use your imagination and creativity to find the best routes to interact with your research partner. The "right" way is the one that meets both your expectations – whether those expectations are for daily interactions or quarterly meetings.

Get your colleagues involved, have back-up participants, and integrate research activities further into the everyday life of your organization; these approaches will all help the

project survive changes in personnel, priorities and structures. In this way, enthusiasm, interest and involvement can be maintained throughout the life of the project, and ensure that in the end, your organization has helped create research it will use.

**Participants #1 advice**

Workshop participants identified high-quality, ongoing interactions between researcher and decision-maker partners as the single most important factor in producing good research questions which meet both partners' expectations.

Their bottom line?

- 1) **Consult and communicate**  
(talk to each other and say what you mean!)
- 2) **Be clear, concise and continuous**  
(nothing beats face-to-face, and lots of it!)
- 3) **Harness culture and context**  
(understand and channel them – don't fight them!)